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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,207

05/12/2006

Ilkka Jutila

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32954 7590 11/13/2008

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EXAMINER

HICKS, VICTORIA J

ART UNIT

PAPER NUMBER

4158

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,207	Applicant(s) JUTILA, ILKKA	
	Examiner VICTORIA HICKS	Art Unit 4158	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/12/06, 5/26/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the application filed on May 12, 2006.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US patent 4,143,656) in view of DeWeerd (US patent D442,688).

[Claim 1] In Figure 1 Holmes teaches a plunger (10) having a first end (11a) and a second end, a first dimension which is the longitudinal direction of the plunger (10). In Figure 2 Holmes teach that the length of the plunger (10) in its longitudinal direction is substantially larger than the diameter of the cross-section perpendicular to the longitudinal direction. In Figures 7-10 Holmes teaches that the plunger (10) has an opening (22) that has been arranged in its longitudinal direction so that the longitudinal axis of the opening (22) is substantially the same as the longitudinal axis of the plunger (10). In column 6, lines 12-16 Holmes teaches that the opening end at the first end of the plunger (10) when subjected to pressure, can assume and elliptical or oval cross-sectional shape (expanding in a direction perpendicular to the direction of the longitudinal axis). Holmes does not teach that the cross-section of the plunger is

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substantially circular or that the tip portion turns at least 35° in relation to a first plane in parallel with the longitudinal axis wherein the surface also turns at least 35° in relation to a plane that is perpendicular to the direction of the longitudinal axis. In Figure 1 DeWeerd teaches an analogous device in which it was a design choice to have the tip portion turn at least 35° in relation to a first plane in parallel with the longitudinal axis wherein the surface also turns at least 35° in relation to a plane that is perpendicular to the direction of the longitudinal axis. In Figures 2 and 3 DeWeerd teaches that the cross-section of the plunger is substantially circular. It would have been obvious for one having ordinary skill in the art at the time of invention to modify the plunger taught by Holmes with the design choices taught by DeWeerd because those elements are known to make the plunger taught by Holmes more effective and comfortable when in use.

[Claim 2] In relation to claim 2, Holmes and DeWeerd teach the apparatus of claim 1 (see rejection of claim 1). Holmes does not teach that the at least one surface turns 90° in relation to the first plane and 90° in relation to the plane at an angle. In Figure 1 DeWeerd teaches an analogous device in which it was a design choice to have at least one surface turn 90° in relation to the first plane and 90° in relation to the plane at an angle.

[Claim 3] In relation to claim 3, Holmes and DeWeerd teach the apparatus of claim 1 (see rejection of claim 1). In Figure 5 Holmes teaches that the tip portion has two surfaces.

[Claim 4] In relation to claim 4, Holmes and DeWeerd teach the apparatus of claim 3 (see rejection of claim 3). In Figure 5 Holes teaches that the two surfaces form a surface pair.

[Claim 5] In relation to claim 5, Holmes DeWeerd teach the apparatus of claim 4 (see rejection of claim 4). In Figure 5 Holmes teaches that the surfaces forming the surface pair of the surface pair are mirror images of each other in relation to a second plane in parallel with the longitudinal axis, whereby this second plane is perpendicular to the first plane.

[Claim 6] In relation to claim 6, Holmes and DeWeerd teach the apparatus of claim 1 (see rejection of claim 1). In Figures 4-6 Holmes teaches at least one surface that is substantially in parallel with the first plane.

3. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US patent 4,143,656), in view of DeWeerd (US patent D442,688) and further in view of Okamoto et al. (US patent 3,918,445).

[Claim 7] In relation to claim 7, Holmes and DeWeerd teach the apparatus of claim 1 (see rejection of claim 1). Holmes and DeWeerd do not teach that the tip portion has four surfaces. In Figures 11 and 13 Okamoto et al. teaches in an analogous

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device a tip portion that has four surfaces (14, 15, 16, r'). It would have been obvious for one having ordinary skill in the art at the time of invention to modify the plunger taught by Holmes as modified by DeWeerd in claims 1-6 with the four surface tip taught by Okamoto et al. because that element is known to give the plunger taught by Holmes better functionality.

[Claim 8] In relation to claim 8, Holmes, DeWeerd and Okamoto et al. teach the apparatus of claim 7 (see rejection of claim 7). Holmes and DeWeerd do not teach that the four surfaces (14, 15, 16, r') form two surface pairs which are mirror images of each other in relation to said first plane in parallel with the longitudinal axis. In Figures 11 and 13 Okamoto et al. teaches an analogous device in which the four surfaces form two surface pairs, which are mirror images of each other in relation to the first plane in parallel with the longitudinal axis.

[Claim 9] In relation to claim 9, Holmes, DeWeerd and Okamoto et al. teach the apparatus of claim 8 (see rejection of claim 8). In Figure 5 Holmes teaches that in at least one surface pair the surfaces forming the surface pair are mirror images of each other in relation to a second plane in parallel with the longitudinal axis, whereby the second plane is perpendicular to the first plane.

[Claim 10] In relation to claim 10, Holmes, DeWeerd and Okamoto et al. teach the apparatus of claim 8 (see rejection of claim 8). In Figure 5 Holmes teaches that the surface pairs are connected with each other.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTORIA HICKS whose telephone number is (571)270-7033. The examiner can normally be reached on Monday through Thursday, 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on (571)272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/V. H./

Examiner, Art Unit 4158

11/5/08

/Fenn C Mathew/

Primary Examiner